R95

FAO Fisheries Reports, No. 95 FI/R95 (En)

Report of the second session of the

INDIAN OCEAN FISHERY COMMISSION

Rome, 26 - 29 October 1970

LIBRARY
NATIONAL MARINE FISHERIES SERVICE
HONOLULU LABORATORY
P. O. BOX 3830
HONOLULU, HAWAII 96812

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
ROME, 1970

FAO Fisheries Reports, No. 95 FI/R95 (En)

REPORT

of the

SECOND SESSION OF THE INDIAN OCEAN FISHERY COMMISSION

Rome, 26 - 29 October 1970

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Rome, December 1970

PREPARATION OF THIS REPORT

This is the final version of the Report as approved by the Second Session of the Indian Ocean Fishery Commission.

Distribution:

FAO Department of Fisheries
FAO Regional Fishery Officers
Members of the Indian Ocean Fishery Commission
Member Countries

"Current Bibliography" Entry:

FAO (1970) 17-1M109
FAO Fish.Rep., (95):21 p.
Report of the second session of the Indian Ocean Fishery Commission, Rome, 26-29 October 1970

Stocks and management - tuna, shrimp. Development programme. Statistical areas. Resolutions.
Co 14-1M093

CONTENTS

	Paragraphs
OPENING OF THE SESSION	1 - 3
ADOPTION OF THE AGENDA AND ARRANGEMENTS FOR THE SESSION	4 - 5
STATE OF STOCKS AND MANAGEMENT	
(a) Tuna Stocks	6 - 15
(b) Shrimp Stocks	16 - 19
(c) Other Stocks	20
INTERNATIONAL INDIAN OCEAN FISHERY SURVEY AND DEVELOPMENT PROGRAMME	21 - 35
FISHERY STATISTICS	36 - 43
COOPERATION WITH OTHER BODIES	44 - 46
ANY OTHER MATTERS	47 - 48
ELECTION OF OFFICERS	49
DATE AND PLACE OF NEXT SESSION	50

		Pages
APPENDIX A	List of Participants	11 - 15
APPENDIX B	Opening Remarks by Mr. Roy I. Jackson Assistant Director-General (Fisheries)	16 - 19
APPENDIX C	Agenda	20
APPENDIX D	List of Documents	21

Digitized by the Internet Archive
in 2025

https://archive.org/details/fao-fisheries-and-aquaculture-report_1970-10_95

OPENING OF THE SESSION

1. The Indian Ocean Fishery Commission (IOFC) held its Second Session from 26 to 29 October 1970 at FAO Headquarters, Rome, Italy. The Session was attended by representatives of 21 member nations, and observers from 6 nations and 4 international organizations. A list of participants is given in Appendix A to this Report.

2. The Session was opened by the Chairman, Dr. G.N. Mitra (India) and the representatives were welcomed in an address by Mr. Roy I. Jackson, Assistant Director-General (Fisheries). (See Appendix B to this Report.)

3. At the Chairman's request, the Commission observed a two-minute silence to honour the memory of the late Dr. W.M. Chapman, who had played a leading part in establishing the Commission and in promoting its Survey and Development Programme.

ADOPTION OF THE AGENDA AND ARRANGEMENTS FOR THE SESSION

4. The Commission considered the Provisional Agenda and adopted it in the form shown in Appendix C to this Report. The documents which were placed before the Commission are listed in Appendix D.

5. On the suggestion of the Chairman, the Commission established a Nominations Committee composed of the representatives from Ethiopia, France, Indonesia, Madagascar, Qatar and Thailand to facilitate the election of officers to serve during the inter-sessional period and the Third Session of the Commission.

STATE OF STOCKS AND MANAGEMENT

(a) Tuna Stocks

6. The Commission considered the report of its Committee on Management of Indian Ocean Tuna (IOFC/70/5) which met in Rome from 22 to 24 October 1970. It congratulated the Committee on its work, and also noted with approval the work of the IOFC Working Party on Stock Assessment in Relation to Immediate Problems of Management in the Indian Ocean which had met in Rome from 30 September to 3 October 1969.

7. While there were some doubts about the precise interpretation of the data on tuna exploitation and uncertainties concerning some important parameters, the available data indicated that some species of large tuna exploited by the long-line fishery were heavily exploited. The Commission was therefore of the opinion that the time had come to give serious consideration to measures for managing the Indian Ocean tuna.

8. The Commission shared the Committee's view that development and management should be considered as complementary aspects of the single aim of rational utilization of the fishery resources of the Indian Ocean. It also endorsed the Committee's suggested guidelines on the objectives of management, to the effect that

(a) The stocks must be maintained at a level which can provide a high sustained yield.

(b) Action to conserve one stock should not interfere with the development of fisheries on other stocks which are still under-exploited.

(c) Management measures should be so framed that, whilst conserving the resources, they would afford the opportunity to countries not yet significantly participating in Indian Ocean tuna fisheries to build up their fishery industry within a reasonable period to associate themselves effectively with programmes of rational utilization on a basis of equality.

9. The Commission noted that divergent views had been expressed in the Committee regarding the machinery available or required to formulate and give effect to management measures. It was unanimous in stressing that one of the prerequisites to rational and effective management was the active participation, in any management scheme, of all countries fishing substantially for tuna in the Indian Ocean.

10. A delegation reiterated and amplified the views it had put forward to the Committee on the need for the establishment, by international convention concluded with the assistance of FAO, of a body similar to the Inter-American Tropical Tuna Commission and to the International Commission for the Conservation of Atlantic Tunas. In its view, which found some support, only such a body would enable the countries concerned that are not Member Nations of FAO to participate fully and on an equal footing in the formulation, adoption and implementation of management measures. Furthermore, in view of the migration of stocks and of the mobility of tuna fishing fleets, a body of this type would be in a position to ensure effective collaboration and coordination with existing commissions responsible for the management of tunas in other oceans.

11. Other delegations shared the views, also expressed in the Committee, that the Commission itself, which had been specifically entrusted with the task of examining management problems, was the most appropriate forum to discuss and recommend management measures, even though this would be a new departure for a subsidiary body of FAO. In their opinion, more developing countries would take part in the work of the Commission than in that of an independent body. They also pointed out that the setting up of a new body by international convention would require considerable time.

12. The Commission felt that it would be premature at this stage to take a definite stand on which arrangements would be most suitable. It agreed that it would also be necessary to have, in this regard, the views of the countries concerned that were not member countries of the Commission and noted that the special meeting recommended by the Committee, as outlined below, would probably afford an opportunity to obtain these views and would allow for a full discussion of the steps required to put management measures into effect.

13. The Commission, therefore, endorsed the conclusions of the Committee and recommended that, subject to approval by the FAO Council

(a) a special meeting of the Committee on Management of Indian Ocean Tuna be convened as early as possible, particularly for the purpose of reviewing the status of the tuna fishery, exchanging views on the need for management measures, on their implementation through the Commission itself or through an independent body set up by treaty, and formulating proposals for temporary and provisional management measures;

(b) a special invitation be issued to those countries that are not Member Nations of FAO but are fishing substantially for tuna in the Indian Ocean, to be represented at the meeting by observers;

(c) the observers from the countries referred to in the preceding sub-paragraph be permitted to participate fully in the discussions of the meeting.

14. The Commission fully approved the emphasis laid by the Committee on the fact that it was essential, in order that international cooperation in fishing activities on the high seas be effective, to enlist the participation of as many interested states as possible. It therefore requested the Director-General of FAO to make every effort to secure such participation and invite the Governments of member countries of the Commission having diplomatic contacts with the non-member countries concerned, to use such contacts to persuade those countries to be represented by observers at the meeting.

15. The Commission recognized that to ensure rational management, it was essential to have good scientific advice. The present scientific studies should be continued, using the most recent information from all sources. The Commission recommended that the work of its Working Party on Stock Assessment should be continued by a permanent group of national scientists. The Commission also recommended that FAO should provide suitable assistance to this group in the collection and compilation of basic statistical, biological and other data. FAO should also assist by preparing a synthesis of available information and a draft report from this scientific group to the Commission.

(b) Shrimp Stocks

16. The Commission took note of the section in the Report of the IOFC Working Party on Stock Assessment in Relation to Immediate Problems of Management in the Indian Ocean (IOFC/70/4), concerning the state of the shrimp stocks in the Gulf between Iran and the Arabian peninsula. The report concluded that the shrimp stocks in various areas of the Gulf were fully, or perhaps, over exploited although in one area some further expansion seemed possible. It also stated that the fisheries for shrimp were concentrated in coastal areas and that there were indications that the stocks in these areas were to a certain extent independent. The report indicated the need for management and discussed the effect of various possible management measures.

17. The Commission was informed that because the exploited areas lie mainly within the areas under national jurisdiction, no action had so far been taken to convene the Committee on the Management of Gulf Shrimp pending further decisions by the Commission. The Commission believed that there was urgent need for management of the shrimp fishery in the Gulf, and asked FAO to promote the introduction of management measures along the lines indicated in the report by drawing the matter to the attention of the nations concerned for their consideration, and by promoting international action where relevant.

18. The Commission underlined the importance of continued assessment of the state of the shrimp stocks in the Gulf as well as the need for shrimp stock assessment in other areas. It therefore decided to set up a special Working Party on Stock Assessment of Shrimp in the Indian Ocean Area. This should be a small working party of experts, which should meet before the next session of the Commission and report to that session. In addition to the Gulf, the Working Party should also pay attention to those other shrimp stocks in the Indian Ocean which appear to be in danger of over-exploitation.

19. The Commission recognized that this work could not be done without adequate support from FAO, and expressed the wish that provisions would be made for this purpose. Member countries were also urged to collect all relevant statistical, biological and other data, and to submit these to FAO for compilation and analysis. Since the problems of assessment of shrimp stocks, and their management appeared to be somewhat similar in all parts of the world, but distinct from the problems of managing the stocks of longer-lived fish, FAO was requested to take note of experience in other oceans in formulating advice concerning Indian Ocean shrimp.

(c) Other Stocks

20. The Commission noted that no fish stocks, other than the tuna and shrimp stocks described above presently appeared to be in need of management. It was an important duty of the Commission to identify management needs, and take any appropriate action as early as possibly to avoid excessive depletion of the stocks and unproductive capital investment. The Commission therefore requested FAO to keep the general status of the stocks under review, and to report further on this matter to its Third Session.

INTERNATIONAL INDIAN OCEAN FISHERY SURVEY AND DEVELOPMENT PROGRAMME

21. The Commission was informed by the Programme Leader of the present status of the Programme. At its First Session the Commission had requested the Director-General to arrange, on behalf of the Commission, a request to the UNDP[1] for support for the preparatory phase of the Programme. A draft project request was prepared and submitted to member countries and other interested countries with a view to their submitting it to the UNDP. To define the activities of the preparatory phase a mission of Preparatory Assistance to Governments (PAG), consisting of three teams, had visited a total of 16 Indian Ocean countries and territories. On the basis of the PAG Mission Report and requests by governments, the UNDP had provided US$ 236,900 to FAO for the preparatory phase. Mr. John C. Marr had been recruited as Programme Leader at the end of January 1970.

22. A number of subject areas in which summary reviews covering the entire Indian Ocean region were necessary for further planning had been defined, including resource inventory, distribution and abundance of fish eggs and larvae, stock assessment, management, statistics, survey and charting of resources, environmental research, experimental fishing and introduction of alternative techniques, vessels and equipment, shipyards, harbours, handling and processing facilities, general economic characteristics in the development process, fishery economics, international trade and economic planning for fishery development. Consultants had been recruited for each of these subjects and were to have summary review reports completed by 1 December 1970. Four such reports had already been completed. These summary review reports would form a major part of the basis for the draft plan for the second or operational phase of the Programme. Other components would include information from the Indian Ocean countries about their needs which they would expect the Programme to meet. The reviews would take into account present and projected national programmes, including those assisted under bilateral or multilateral schemes.

23. A small group of experts would work with the Programme Leader in preparing the draft plan for the operational phase. It was planned to have this completed by the end of January 1971. In February-March 1971 it would be reviewed by advisory bodies to FAO, such as ACMRR. The plan would be ready for presentation to the Commission in April 1971. Since the Commission would not normally meet again for 12 - 18 months after that time, it was suggested that an Executive Committee be established with authority to act for the Commission on matters relating to the Programme. If such a Committee were established and if it acted upon the draft plan for the operational phase of the Programme, the plan would be ready at the end of April 1971 for submission to governments, UNDP, the IBRD (World Bank), Regional Banks, etc. and the necessary steps for implementation could then be initiated. At the same time, arrangements would be made for a meeting of high level consultants to be held in the autumn of 1971. At this meeting, representatives of the economically developed countries interested in the Programme would meet to discuss implementation of the Programme and what part each might play. In view of the time required for proposals to meet governmental and UNDP requirements, it seemed likely that the autumn of 1972 would be the earliest time when elements of the operational phase of the Programme could be active.

24. Following this review of progress in the planning phase of the Programme and the schedule for the remainder of 1970 and for 1971, the Programme Leader gave a forecast and examples of projects which would probably be included in the plan for the operational phase of the Programme. In the selection of projects for the Programme, emphasis would be given to the fundamental objective of the Programme to promote fishery development, and hence contribute to general economic development, provide a source of proteins, and provide a source of foreign exchange. Two basic premises had to be recognized: no country is in a position to undertake all the above mentioned projects at once, and maximum use should be made of existing facilities. The plan for the operational phase would identify further opportunities for fishery development. It would comprise a list of projects which could be considered by governments, the UNDP, IBRD and Regional Development

---

1/ United Nations Development Programme

Banks, bilateral assistance programmes, and the private sector. The costs and benefits of particular development opportunities would be specified as much as possible.

25. Some examples of likely projects were given to the Commission. Among the work needed were surveys to identify the species, the distribution, and abundance of pelagic fishes in areas of high productivity in the following order of geographic priority: (a) North-Eastern Africa - Arabian Penisula,(b) Mascarene Islands, (c) West coast of India, (d) Bay of Bengal, (e) South of Indonesia. In some cases harbour development had to be linked to fishery development. For example, Somalia had a long Indian Ocean coast line with no harbour and about half as much coast line on the Gulf of Aden with only one harbour. Distribution systems needed improvement, as for example from the West coast ports of Phuket and Ranong, Thailand, to the centre of population in Bangkok. Demand and price projections, as an aid to investment decision, would be provided for tuna, shrimp, fish meal, crab, and groundfish. Finally, there was a number of regional activities or services which might best be provided by a Technical Staff attached to the Commission. These could include stock assessment, the formulation of management measures required, including those for tuna, a regional data centre, and a suitable coordinating machinery for regional experts.

26. Financing for the operational phase may be expected to come from a variety of sources, including Indian Ocean countries, the UNDP, bilateral arrangements, IBRD or Regional Development Bank loans or technical assistance, and the private sector. As was noted at the First Session of the Commission, substantial contributions were expected from the economically developed members of the Commission.

27. The Commission was appraised of several development possibilities which might facilitate the ability of Indian Ocean countries to utilize the fishery resources of the Indian Ocean. These included: (a) initial preferential treatment for Indian Ocean countries in a fishery in which there was an annual total catch quota, (b) joint ventures, (c) participation by non-Indian Ocean countries on a secondary level as suppliers of equipment, and (d) through the establishment of a Regional Fishery Development Agency.

28. The Commission recognized the need to avoid waste of both investment capital and fishery resources. In a broader sense this would involve reconciliation of national policies and policies between countries.

29. The Commission was appreciative of the interest of the UNDP in the Programme, and looked forward to a continuation of this interest.

30. The Commission noted with satisfaction the progress that had been made and the broad approach to planning taken and approved the time schedule that was being followed. It awaited with great interest the completion of the plan which would enable it to determine the final scope and content of the programme and the priorities within it. It approved the proposal that the programme should be so framed as to maximise the benefits to the least developed nations of the area.

31. It was recalled that the Indian Ocean, for the purposes of the Programme, should include adjacent seas including the Gulf lying between Iran and the Arabian Peninsula and the Red Sea, and that the opinion had been expressed at the first Session of the Commission that, in the first instance, the Programme should be directed mainly at resources in the north-western part of the Ocean and its adjacent seas lying west of Ceylon and north of the Equator.

32. Considerable interest was evidenced in training and it was suggested that adequate attention be given to this subject when the budgetary aspects of the operational phase were being formulated.

33. The Commission considered the appointment of an Executive Committee to act for the Commission between sessions on Programme matters to be essential in order to avoid possible delays in the consideration of the operational phase of the Programme. It recognized that while an Executive Committe would have the authority to act for the Commission with respect to, for example, accepting the plan for the operational phase, it would not have the authority to act for governments in the sense of committing country funds or deciding priorities. The Commission decided to establish an Executive Committee and adopted the following resolution:

RESOLUTION NO. IOFC/2/1

Executive Committee for the Implementation of the International Indian Ocean Fishery Survey and Development Programme

THE COMMISSION

Implementing

its conclusion that there should be established a subsidiary body to facilitate its task of coordination and implementation of the International Indian Ocean Fishery Survey and Development Programme,

Hereby establishes

in accordance with Rule IX-1 of its Rules of Procedure, an Executive Committee for the Implementation of the International Indian Ocean Fishery Survey and Development Programme, hereinafter referred to as the Executive Committee.

Terms of Reference

The activities of the Executive Committee shall in particular include the following:

(a) to act for the Commission during inter-sessional periods with respect to matters relating to the International Indian Ocean Fishery Survey and Development Programme, including the approval, on behalf of the Commission, of the Programme plan and request for support for transmittal to the UNDP and other appropriate bodies

(b) the Executive Committee shall work closely with the Programme Leader

(c) the Executive Committee may consult with non-Committee members as appropriate

(d) the Executive Committee shall report to the Commission, at each Session, its activities during the preceding inter-sessional period

(e) the Executive Committee shall meet as necessary to carry out its responsibilities

Membership

The membership of the Executive Committee shall consist of the Chairman and the Vice-Chairmen of the Commission, as well as representatives of not more than four other countries. The Chairman shall serve as the Chairman of the Executive Committee.

Secretariat

The Programme Leader shall serve as the Technical Secretary and the Secretary of the Commission shall also serve as the Secretary of the Executive Committee.

34. The Commission agreed that any of its member nations could attend meetings of the executive committee as observer and take part in its deliberations and decided on this occasion not to nominate representatives of any country in addition to the Chairman and Vice-Chairmen.

35. The Commission noted with great pleasure the statements by two observers concerning contributions to the Programme. The observer from Norway reported his Government's interest in the region and that his Government was considering making available to FAO a fishery research vessel including part of its operating costs. While the use to be made of such a vessel would be at the discretion of FAO, its use might be considered in some aspects of the Programme. It was possible that in that event the services of a scientific staff might also be made available. The Commission also noted with pleasure the offer of cooperation by the observer from the South East Asian Fishery Development Center (SEAFDEC), and the possibility of its vessels collaborating in Indian Ocean investigations.

FISHERY STATISTICS

36. The Commission considered the Report of the First Session of the IPFC/IOFC Joint Working Party of Experts on Indian Ocean and Western Pacific Fishery Statistics (IOFC/70/7) which was held in Bangkok from 1 to 5 December 1969 and a further document, Fishery Statistics in the Indian Ocean Fishery Commission (IOFC) Region, (IOFC/70/8), which drew attention to points of immediate interest in the Working Party's Report. It also noted with approval the summary statistics relevant to the Commission's work given in the two Bulletins of Fishery Statistics made available to it (IOFC/70/9 and IOFC/70/10). The Commission complimented the Working Party on its Report and, noting the large number of topics covered and the amount of detail involved, agreed that discussion be restricted to four main topics:

(a) The definition of the Indian Ocean Statistical Region

(b) The need for a Regional Fishery Statistician

(c) The need for a Regional Fishery Taxonomist

(d) The preparation of a manual on fishery censuses.

37. The Commission urged member governments to ensure that written comments on all aspects of the Working Party's Report are sent to the Secretariat to permit the fullest preparation for the second session of the Working Party which is proposed to be held in the first half of 1971.

38. With respect to the definition of the two major sea areas which might constitute the Indian Ocean Statistical Region - viz. the Western Indian Ocean Statistical Area and the Eastern Indian Ocean Statistical Area, the Commission noted that such areas were defined for statistical purposes only and that no other interpretation should be given to any boundaries which might be so defined. With respect to the delineation of the area boundaries, the Commission agreed on the following:

(a) <u>The boundary with the Atlantic Ocean</u>

The Commission agreed that this boundary should be along 30°E, as this was in reasonable accordance with the distribution of the fauna.

(b) <u>The boundary between the Malay Peninsula and Sumatra</u>

The Commission felt that, in view of the similarity of stocks in the Malacca Strait and the South China Sea, the boundary line should be moved north-westwards. However, no agreement was reached as to the best position for this boundary, the two main proposals being either a line eastwards from the

northern tip of Sumatra to the Malay Peninsula, or a line northwards from the northern tip of Sumatra along 95°E as far as 10°N and then eastwards to the Malay Peninsula. The matter was therefore left open for further consideration by the Working Party.

(c) The boundary between eastern Java and Australia

The Commission considered alternative proposals: one for a line from eastern Java through the islands towards Timor as far as 125°E and then south to the Australian coast; the other for a line southwards from Bali along 115°E to 15°S, then eastwards to the Australian coast. The matter was referred for further consideration by the Working Party.

(d) The boundary from southeast Australia to 50°S

The Commission suggested that the Working Party examine the desirability of moving this line which now lies along 150°E westwards to lie along 145°E.

(e) The boundary between eastern and western Indian Ocean

The Commission approved the Working Party's recommendation to move this to the eastward of Ceylon.

(Member nations of the Commission were asked to continue to cooperate with the Working Party to resolve the outstanding questions.)

39. On the question of the need for a Regional Fishery Statistician the Commission agreed that the duties of such an officer fell into two groups, each of which could best be dealt with separately:

(i) To assist developing countries in the Region with the development of efficient national fishery statistical organizations producing reliable statistics.

(ii) To ensure the establishment of an efficient international system for the reporting of national statistics to a central office, and the subsequent compilation and publication of those international fishery statistics which are essential for the purpose of development and management of the Indian Ocean fisheries.

40. The Commission agreed that the essential purpose of improving the basic national statistics would best be achieved by setting up a post for a Regional Fishery Statistician under UNDP(TA) 1/ The Commission therefore recommended that FAO assist the countries in the region in taking the necessary steps for the early establishment of such a post.

41. Support was also expressed by the Commission for the appointment of another regional statistician who would be responsible for the development of an international statistical reporting system on the lines of those presently employed by other international fisheries agencies such as the International Council for the Exploration of the Sea (ICES),etc. It suggested that such a post might be financed under the International Indian Ocean Fishery Survey and Development Programme but pending further elaboration of this Programme no definite recommendation was made concerning possible financing of this work.

42. It was agreed by the Commission that there was a need for the development of lists of species for statistical purposes. The construction of such lists was essential for the classification of total catch by single species or groups of species for both

1/ United Nations Development Programme (Technical Assistance)

national and international purposes. The Working Party had suggested that this could best be carried out by a taxonomist spending two years in the region, but the Commission expressed doubts as to whether such a task could be carried out by one scientist, even taking account of the fact that he should restrict his activities to the species of commercial importance. It therefore recommended that steps be taken by the Secretariat to ascertain whether the task could be undertaken by various research institutes throughout the area. It noted that this work should include the development of species identification sheets for statistical purposes referred to in paragraph 6.6 of IOFC/70/7. It also proposed that FAO promote this task within the ambit of UNDP/SF[1] projects in the region, employing monies available for the employment of consultants as required.

43. The Commission briefly discussed the possible need for a manual on fishery censuses and recommended that a short paper laying down guidelines would be more useful at this stage and should be submitted to the next session of the Working Party. This did not preclude the eventual publication of a manual on the subject.

COOPERATION WITH OTHER BODIES

44. The Commission considered its future cooperation with the recently established International Commission for the Conservation of Atlantic Tunas (ICCAT) and agreed that the Working Party advising its Committee on Management of Indian Ocean Tuna should maintain close consultation with ICCAT on matters concerning distribution and possible movements of tunas and of tuna fishing vessels between the Atlantic and Indian Oceans. Mutial exchange of information on tuna statistics, stock assessment and problems of management was strongly urged.

45. The Commission was informed of a Convention on the Conservation of the Living Resources of the Southeast Atlantic which is expected to come into force in the near future and noted the clauses of the convention (as reproduced in IOFC/70/11) which may be of interest to its future activities.

46. The Commission hoped that the close cooperation with the Indo-Pacific Fisheries Council (IPFC), including that in the field of fishery statistics through the joint working party, would continue.

ANY OTHER MATTERS

47. To facilitate its inter-sessional activities, the Commission agreed that members should be invited to designate officers with whom the Secretariat could correspond directly on technical matters. The Commission therefore decided to recommend to its members the appointment of liaison officers. It suggested that in these cases where governments had already appointed liaison officers for the International Indian Ocean Fishery Survey and Development Programme, the same officers should also be responsible for liaison on other activities of the Commission.

48. The Commission was informed of the activities of the Southeast Asian Fisheries Development Centre (SEAFDEC), which is a multilateral institution whose participants include Malaysia, Japan, Philippines, Singapore, Thailand and Viet Nam. It operates a Training Centre in Bangkok and a Research Centre in Singapore. There is a vessel attached to each Centre. Cruises in the Indian Ocean are planned and the Commission welcomed the offer of future cooperation in the International Indian Ocean Fishery Survey and Development Programme.

1/ United Nations Development Programme (Special Fund)

ELECTION OF OFFICERS

49. Upon proposal by its Nominations Committee, the Commission elected the following officers:

Chairman:	Mr. J. Kambona (Tanzania) - by name
Vice-Chairmen:	Mr. E.G. Goonewardene (Ceylon) - by name
	Australia
	Indonesia
	Madagascar
	Qatar
	United States of America

DATE AND PLACE OF NEXT SESSION

50. The Commission considered the date of its next Session and agreed that it should be held in 1972, the precise date to depend on the progress of inter-sessional work and to be decided by the Director-General in consultation with the Chairman. The Commission received with appreciation an invitation by the Government of Ceylon to hold its next Session in Ceylon and recommended that the Director-General should give favourable consideration to holding it there.

APPENDIX A

LIST OF PARTICIPANTS

MEMBERS OF THE COMMISSION

Australia

SETTER, C.G.
First Assistant Secretary
Fisheries Division
Department of Primary Industry
Canberra, A.C.T.

Bahrain

NIVEN, D.R.
Fisheries Adviser
Government of Bahrain
P.O. Box 235
Manama

Ceylon

GOONEWARDENE, E.G.
Permanent Secretary
Ministry of Fisheries
Colombo

PATHIRANA, W.
Director of Fisheries
Ministry of Fisheries
Colombo

Cuba

Ethiopia

TSEGAYE, K.
Assistant Minister of Agriculture
Ministry of Agriculture
Addis Ababa

France

LABROUSSE, B.
Administrateur civil
Chef de Bureau au Secrétariat général
à la marine marchande
3 Placé de Fontenoy
Paris 7e

ALLAIN, C.
Chef de service
Institut scientifique et technique des
pêches maritimes
La Noë
Route de la Jonelière
44 Nantes

Greece

India

MITRA, Dr. G.N.
Joint Commissioner (Fisheries)
Department of Agriculture (Fisheries Wing)
Ministry of Food, Agriculture,
Community Development and Cooperation
New Delhi

Indonesia

TJIPTO, A.W.
Secretary
Directorate General of Fisheries
Department of Agriculture
16 Salemba Raya
Djakarta

SIDHARTO, A.
Head, Planning Division
Directorate General of Fisheries
Department of Agriculture
16 Salemba Raya
Djakarta

SUSANTO, V.
Senior Official
Directorate General of Fisheries
Department of Agriculture
16 Salemba Raya
Djakarta

Iraq

AL-HAMED Director-General, Dr. M.I.
State Fishing and Fish Processing
Company and Director of Fisheries
Zaafraniyah
Baghdad

Israel

Japan

KATAKAMI, I.
Minister
Embassy of Japan
Via Virginio Orsini 18
00192 Roma

SUDA, A.
Director
Pelagic Resources Division
Far-Sea Fisheries Research Laboratory
Fisheries Agency
Ministry of Agriculture and Forestry
Tokyo

MIMURA, K.
First Secretary
Embassy of Japan
Via Virginio Orsini 18
00192 Roma

TANABE, R.
Technical Official, International Section
1st Ocean Division, Production Department
Fisheries Agency
Ministry of Agriculture and Forestry
Tokyo

SHIMURA, S.
Assistant Chief
Guidance Division
Federation of Japan Tuna Fisheries
Cooperative Associations
22-3, 2-chome, Kudankito, Chiyoda-ku
Tokyo

Jordan

JUM'A, His Excellency Salah
Ambassador
Permanent Mission of Jordan to FAO
Via Po 24
00198 Roma

Kenya

MBOTE, W.N.
Assistant Director of Fisheries
Ministry of Tourism and Wildlife
P.O. Box 30027
Nairobi

Korea

SUH HACK KURN
Chief
Technical Management Section
Fisheries Research Centre
Pusan

JU IN SONG
Agricultural Attaché
Embassy of the Republic of Korea
Via Barnaba Oriani 30
00198 Roma

Kuwait

AL SHARHAN, A.M.
Director
Fisheries Division
Ministry of Public Works
Kuwait City

Madagascar

RAKOTOVAHINY, Dr. M.
Chef du Service des pêches maritimes
et des industries animales
Ministère de l'agriculture
B.P. 291
Tananarive

BOTRALAHY, Son Excellence Alfred
Ambassadeur de Madagascar et Représentant
Permanent aupres de la FAO
Ambassade de la République Malgache
via Riccardo Zondonai 84A
00194 Roma

Malaysia

PATHANSALI, D.
Chief Research Officer
Fisheries Research Institute
Penang

Mauritius

TSANG MAN KIN, J.
Second Secretary
Mauritius Embassy
68 Boulevard de Courcelles
Paris 17e

Netherlands

Pakistan

KHALIL, M.I.K.
Agricultural Counsellor
Embassy of Pakistan
Lungotevere delle Armi 22
00195 Roma

Portugal

VALDEZ, V.
Diretor
Centro de Bioceanologia e Pescas
Ministerio do Ultramar
Lisboa 3

DE FREITAS, A.J.O.
Director, Fisheries Research Programmes
Missão de Estudos Bioceanológicos
e de Pescas de Moçambique
Caixa Postal 1723
Lorenço Marques, Moçambique

MONTEIRO, Dr. R.H.
First-class Researcher
Instituto de Biologia Marítima
Ministerio da Marinha
Lisboa

Qatar

FARAH, M.S.
Director of Agriculture
P.O. Box 36
Doha

DARWISH, H.
Ministry of Industry and Agriculture
P.O. Box 2233
Doha

Tanzania

KAMBONA, J.J.
Chief Fisheries Officer
Ministry of Agriculture, Food and
Cooperatives
Natural Resources Division
P.O. Box 2462
Dar-es-Salaam

KILLANGO, A.B.C.
Fisheries Officer
Ministry of Agriculture, Food and
Cooperatives
Research and Training Division
P.O. Box 2066
Dar-es-Salaam

Thailand

KARNASUT, P.
Director-General
Department of Fisheries
Ministry of Agriculture
Bangkok

MENASVETA, Dr. D.
Senior Fisheries Technical Officer
Division of Fisheries Investigation
Department of Fisheries
Ministry of Agriculture
Bangkok

United Kingdom

HALL, Dr. D.N.F.
Fisheries Adviser
Overseas Development Administration
Foreign and Commonwealth Office
Eland House, Stag Place
London, S.W.1.

United States of America

WILSON, R.C.
Chief
Division of International Agreements
and Organizations
National Marine Fisheries Service
Department of Commerce
Washington

BROADHEAD, G.C.
President
Living Marine Resources, Inc.
11339 Sorrento Valley Road
San Diego, California 92121

Viet-Nam

OBSERVERS

Canada

Mr. J.E. Montgomery
First Commercial Counsellor
Embassy of Canada
Via G.B. de Rossi 27
Rome

Italy

DI BETTA, A.
Ten. Col. di Porto
Direzione Generale della Pesca
Ministero della Marina Mercantile
Viale Asia
EUR, 00144

Norway

SAETERSDAL, G.
Director
Directorate of Fisheries
Bergen

Peru

ARRIOLA, S.
Representante Permanente del Perú
ante la FAO
Embajada del Perú
Via Po 22
00198 Roma

Somalia

SIDO ROBLE SIMBA, Dr.
Economic and Commercial Counsellor
Embassy of the Somali Democratic Republic
Via dei Gracchi 305
00192 Roma

EDELMAN, M.
Project Manager
Fisheries Survey Project
Mogadiscio

Spain

MAIZA ESNAOLA, M.
Presidente
Grupo Sindical Autónomo de Armadores
de Buques Congeladores de Huelva
Paseo de los Naranjos 12
Huelva

BORERO MORANO, A.
Vocal
Grupo Sindical Autónomo de Armadores
de Buques Congeladores de Huelva
Paseo de los Naranjos 12
Huelva

UNDP

RIPLEY, W.E.
Project Officer
Animal and Fish Resources Programme
United Nations Development Programme
United Nations
New York, U.S.A.

East African Marine Fisheries Research Organization (EAMFRO)

BELL, B.E.
Director
East African Marine Fisheries Research
Organization
P.O. Box 668
Zanzibar

International Commission for the Conservation of Atlantic Tunas (ICCAT)

VALDEZ, V.
(see Portugal)

South East Asian Fishery Development Center (SEAFDEC)

MENASVETA, Dr. D.
(see Thailand)

DEPARTMENT OF FISHERIES

Assistant Director-General (Fisheries)	Roy I. Jackson
Director of Programme Coordination and Operations	F.E. Popper
Director for Operations	H.C. Winsor
Programme Leader, Indian Ocean Fisheries Survey and Development Programme	J.C. Marr
Director, Fishery Resources Division	M. Ruivo
Director, Fishery Economics and Institutions Division	J.A. Storer
Director, Fishery Industries Division	H. Watzinger

SECRETARIAT

Secretary	H. Rosa, Jr., Chief Fishery Liaison Office
Assistant Secretary	J.E. Carroz Fishery Liaison Officer (International Organizations)
Reports Officer	V. Shah Technical Officer

Appendix B

OPENING REMARKS BY MR. ROY I. JACKSON,
Assistant Director-General (Fisheries)

Mr. Chairman, Distinguished delegates, ladies and gentlemen,

It gives me very much pleasure, on behalf of the Director-General, to welcome you to FAO and to have, once again, the opportunity of working with many old friends in a joint effort to solve some of the fishery problems of the Indian Ocean.

By way of introduction I would like to quickly review for you the task that this Commission set itself at its First Session to accomplish in the inter-sessional period. This comprised a programme of work which perhaps was very ambitious for a new international fishery body. I am glad to say that despite the magnitude of the undertaking a considerable amount of groundwork has been completed during this period, some not perhaps as quickly as we would have liked, but nevertheless at an encouraging pace.

At its First Session it was decided that the Second Session of the Commission should be held approximately 18 months hence, depending on the progress of the inter-sessional work to be carried out. We are instead meeting two years after the First Session. I would like to point out that this delay was not due to lack of attention on our part to the Commission's programme of work but rather to the many teething problems which we have had to overcome, mainly those involved in launching the International Indian Ocean Fishery Survey and Development Programme, which have taken more time than we originally hoped and anticipated.

Two of the major points of the programme of work of the Commission, as you know, are the management of the tuna resources of the Indian Ocean and the initiation of the Programme to which I have just referred.

As far as the management of tuna resources is concerned, a Working Party on Tuna Stock Assessment was established by FAO as a result of a recommendation made by the Commission at its First Session. It met for the first time in 1969 and agreed, after considering scientific evidence, that management measures are required for some of the tuna fisheries in the Indian Ocean. The complete findings of the Working Party have just been considered by your Committee on Management of the Indian Ocean Tuna.

I regret that as I had to accompany our Director-General to the United States last week I was unable personally to follow the work of this Committee. However, I have seen the report which it adopted and which is now presented for your consideration. I trust you will agree with me that the Committee is to be congratulated on the way it has rapidly identified issues, reached a concensus on the most effective future action and taken account of all the various aspects which should be borne in mind in managing a fishery resource.

The Committee agreed that the stocks must be maintained at a level which can provide a high sustained yield and while further and more recent data are necessary to define the management requirements of particular tuna species, as a first step towards rational management, the rate of long-line fishing activities should not exceed appreciably the present levels unless new stocks are located.

I feel that the Committee has made a major contribution to the role of management by emphasizing the role of management not only as a conservation measure or an economic measure but as a measure of development. Thus, it agreed that management measures should

be so framed that, while conserving the resources, they would afford the opportunity to countries not yet significantly participating in Indian Ocean tuna fisheries to build up their fishery industry within a reasonable period to associate themselves effectively with programmes of rational utilization on a basis of equality. I would suggest that this important recognition stems from the fact that the IOFC is actively considering both management and development of the fishery resources of the Indian Ocean instead of these issues being dealt with under separate auspices at different times.

The Committee has also identified the immediate steps you should consider. I suppose that it is in the nature of an international civil servant to envisage international action at a faster rate than is usually possible by the requirements for each government to obtain the necessary authority. In this sense perhaps I would have preferred to see the Committee recommend specific measures immediately. However, I fully appreciate the need for a special meeting as recommended by them and undertake to make the necessary arrangements as soon as possible, subject to your approval and that of our Council.

At the First Session of the Commission various proposals were put forward regarding the way in which management measures should be implemented and executed. The establishment of an independent body with explicit regulatory powers was considered. If this alternative were to be chosen, the preparation, adoption and ratification by the countries concerned of a formal international instrument would be required. According to our previous experience this is a very lengthy procedure, taking from three to four years for the new body to become operational. This would of course mean the loss of precious time which we can ill afford, considering the state of some of the stocks.

There are also the financial aspects to be considered. The establishment of a new body would probably require the appointment of a Secretariat and funds would have to be provided to finance this and the proper operation of the body.

The other solution would be to deal with the matter within the framework of IOFC and I believe, Mr. Chairman, that perhaps this procedure would be the speediest and most effective one to deal with the matter in the circumstances. This would also obviate a great deal of expense for the countries concerned, as the Secretariat and the costs of the publications and meetings are already covered by FAO. Unfortunately the funds available in the regular programme of FAO for its fishery bodies are rather limited, but were trust funds to be set up by the countries concerned to complement the funds available to us, qualified staff could also be provided to give the services required for the implementation of the measures the Commission may wish to recommend.

As you know one of the main functions of this Commission is to examine management problems. According to its Statutes the Commission is to report and make recommendations to the FAO Conference through the Director-General of FAO. However the Statutes also specify that IOFC reports, including any conclusions and recommendations, will be circulated "to interested Member Nations and Associate Members, and international organizations, for their information as soon as they become available". This would allow the Director-General to bring matters requiring urgent attention to the notice of governments without delay so that they could take action on them.

Mr. Chairman, in finalizing my remarks on this subject I would like to point out that while it ultimately falls upon the countries interested in the tuna fishery to ensure the rational exploitation and management of those stocks in the Indian Ocean, this Commission has a decisive role in formulating the measures required which are readily acceptable to the government concerned and will permit speed implementation. FAO is prepared to assist the Commission to the outmost limits of its resources.

I have dealt with the question of management of the tuna stocks at some length because it is a problem of immediate importance for which IOFC has the prime responsibility. However, as you know, the other major task confronting the Commission is to coordinate the efforts to assess the fishery resources of the Indian Ocean with a view to further exploiting them. Catches of fish from the Indian Ocean in 1968 totalled about 2.4 million tons. In a major FAO study just issued, it has been estimated that, considering only the familiar types of fish, these catches could be increased some 5-fold. Even greater possibilities have been mentioned, and I believe that a 5-fold increase, to some 14 million tons is entirely realistic. A lot has been talked about the opportunity for development in the northern part of the Arabian Sea, where there are large unexploited stocks of pelagic fishes, but significant opportunities also exist in many other parts. One area about which little is known, but which current literature suggests is highly productive lies off the western coast of Indonesia. The identification of the potential is only the first step towards attaining an actual sustained harvest of 14 million tons a year.

This brings me to the International Indian Ocean Fishery Survey and Development Programme and here I would like to refer to one of your working documents (IOFC/70/6). This reviews the progress made so far in implementing the preliminary phase of the Programme, sets a tentative date for the preparation of a draft plan for its operative phase and proposes the establishment by the Commission of an Executive Committee to facilitate the coordinating functions of the Programme.

I do not intend to review in detail here the progress made so far in developing the Programme as Mr. Marr, the Programme Leader, will be giving you a full report when the appropriate agenda item is considered. I am sure that many of you know Mr. Marr. He was for many years Area Director of the US Bureau of Commercial Fisheries in Hawaii and was also Chairman of the Indo-Pacific Fisheries Council up to 1969. He was a member of the United States delegation to the First Session of the Commission.

I would like too, in this regard, to make special reference to the valuable assistance given so far by UNDP to the Programme, without which it would have been impossible to initiate such an immense venture.

Mr. W.E. Ripley, recently appointed Project Officer of the Animal and Fishery Resources Programme of the UNDP, is here with us today and I hope that he will be able to inform you further on the future role of UNDP in the Programme when we come to discuss the relevant agenda item.

I would also like to refer to the encouraging interest shown so far by many countries to participate in the Preparatory Phase of the Programme. The developing countries are participating in this phase mainly through their fishery development projects, including UNDP assisted projects, which are currently in operation. A training element in this phase ensures that some of their key scientists and research workers are given an ample opportunity to contribute to and learn from the organization of a large international programme. The developed countries are participating by making data and consultants available to formulate in depth the scope of each sector of the programme. While this participation is encouraging and valuable it should be noted that the initiation of the preparatory phase depended primarily on the allocation of the UNDP as none of the countries concerned were forthcoming with cash contributions. I feel it my duty to emphasize that the implementation of the operational phase will involve substantial commitments by all interested countries. I am sure that the plan of the programme will show how all countries, developing and developed, which wish to engage in fishing operations in the Indian Ocean, can benefit from such activities. In addition to the normal items of investment for infrastructure, operating equipment and capital, I suggest that participation in the programme be considered a separate and prior item of investment. This participation may take a number of forms: governments may contribute in cash and/or kind

to a project executed by FAO or a research institution; they may assume responsibility for a project, individually or jointly; they may undertake a co-operative resource investigation, each country providing according to its competence and capability, vessels, gear or expertise; they may undertake to train personnel from countries less favoured than themselves in scientists or technologists; or they may set up pilot operations. Each of these activities would be a sub-project of the overall International Indian Ocean Fishery Survey and Development Programme.

During recent years, Mr. Chairman, many national and international organizations have stressed the importance of ocean exploration to benefit mankind. Numerous resolutions have been adopted by the UN General Assembly and agencies of the United Nations in this regard. However, no large-scale international programmes for survey and development of fishery resources as comprehensive as that of the IOFC has yet been put into action. The Commission, we can say therefore, is playing a pioneering role in this context and I sincerely hope that as a result of our deliberations the necessary effort will be mobilized for the implementation of the successive phases of the Programme.

I would like now to briefly refer to the third point of the Commission's programme of work which concerns statistics. The IOFC/IPFC Joint Working Party on Statistics, established by the First Session, met last year. Its report, together with a document drawing attention to points of immediate interest contained therein have been distributed for your consideration.

The report emphasizes the importance of adequate national and international statistics for the Commission's activities in management of heavily fished stocks, and for development. Certain action to strengthen the collection of statistics at the national level, and to aid the compilation of accurate and up-to-date international statistics is proposed for your consideration.

Mr. Chairman, I would like to take this opportunity to pay a well-deserved tribute to our dear friend of long standing, the late Dr. Chapman. Wib, who I am sure was well known to most of you, always had a keen interest in the development of the fisheries of the Indian Ocean. He was, I would say, one of the originators of the idea of this Commission and of its International Indian Ocean Fishery Survey and Development Programme, in which he participated as a consultant and adviser. At the First Session he gave us the benefit of his extensive knowledge in this area and the void his absence here today provides is, I am sure, deeply felt by all of us. Dr. Chapman's contribution will, I am sure, provide a continous source of inspiration to the work of this Commission.

Mr. Chairman, in completing my remarks, I would like to thank the delegates and their governments for the support they are giving to the Commission, an immediate proof of which is the seniority and the competence assembled in the delegations to guide the future work and bring about the further exploitation and the rational management of the resources of the Indian Ocean. This Commission has the mandate to guide the utilization of these fisheries resources. It has arranged its programme of work to fulfill this mandate. If it accomplishes it satisfactorily, it will set a precedent for other fishery bodies and other areas. I am sure I cannot emphasize enough the difficulties of its tasks and the importance of not wavering from them and putting our effort on a continuing basis. FAO, as the parent of this Commission realizes its duty to support it. I wish you every success for this Session.

Appendix C

AGENDA

1. Opening of the Session
2. Adoption of the Agenda and arrangements for the Session
3. State of stocks and management
   (a) tuna stocks
   (b) shrimp stocks
   (c) other
4. International Indian Ocean Fishery Survey and Development Programme
5. Fishery statistics
6. Cooperation with other bodies
7. Any other matters
8. Adoption of the report and recommendations
9. Election of officers
10. Date and place of next session

Appendix D

LIST OF DOCUMENTS

IOFC/70/1		Provisional Agenda
	2	Annotated provisional agenda
	3	Provisional timetable
	4	Report of the IOFC Working Party on Stock Assessment in Relation to Immediate Problems of Management in the Indian Ocean
	5	Report of the IOFC Committee on Management of Indian Ocean Tuna, First Session
	6	A review of the International Indian Ocean Fishery Survey and Development Programme
	7	Report of the IOFC/IPFC Joint Working Party of Experts on Indian Ocean and Western Pacific Fishery Statistics
	8	Fishery Statistics in the Indian Ocean Fishery Commission (IOFC) Region
	9	Bulletin of Fishery Statistics: Tunas
	10	Bulletin of Fishery Statistics: Indian Ocean species
	11	Cooperation between the Indian Ocean Fishery Commission and other bodies
	12	Liaison Officers
IOFC/70/Inf.	1	List of documents
	2	Information for delegates
	3	Report of the First Session of the Indian Ocean Fishery Commission
	4	List of participants (Provisional)

MR/B0593/1.71/E/1/950